

U.S. FIRE ADMINISTRATION ADOPTS OFFICIAL POSITION ON RESIDENTIAL FIRE SPRINKLERS

U.S. Fire Administrator Greg Cade's Remarks to Graduates of the National Fire Academy's Executive Fire Officer Program Attending the 20th Annual Symposium

As the U.S. Fire Administrator, it is my job to direct programs implemented to reduce the loss of life and property due to fire and related emergencies, through leadership, advocacy, coordination, and support. In that role, I would like to address members of the Fire Service, homeowners, homebuilders, and other interested parties about the powerful protection from fire provided by residential fire sprinkler systems and why all homes should be equipped with them.

Every day the U.S. Fire Administration collects news stories from our Nation's media that deal with the tragic loss of life from fire in American homes. In January and February alone, over 300 people lost their lives in home fires. Commercial buildings such as schools, office buildings, and factories have benefited from fire protection sprinkler systems for over a century. But what about our homes? Although we protect our businesses from fire, what actions do we take to protect our families, our homes, and our possessions from fire? Millions of Americans have installed smoke alarms in their homes in the past few years, but a smoke alarm can only alert the occupants to a fire in the house. It cannot contain or extinguish a fire. Residential fire sprinkler systems can.

In the year 2006, 19% of all reported fires occurred in one- and two-family structures; however, these fires caused 66% of the fire deaths in the United States – over 2,100 people died in their own homes. In addition, approximately 25 firefighter deaths occur during responses to residential fires each year. Despite the fact that these statistics represent improvement over the last 30 years, they continue to be appalling. Such losses are unacceptable.

Since the 1970's, the U.S. Fire Administration has promoted research studies, development, testing, and demonstrations of residential fire sprinkler systems and smoke alarms. These efforts, in concert with heroic efforts by many organizations and individuals, have resulted in the adoption of requirements to install smoke alarms in all new residential construction. In many jurisdictions, the retrofit of smoke alarms into existing residential occupancies has been mandated. Together, these initiatives have saved many lives.

The results have been different, however, with respect to residential fire sprinkler systems; only a few jurisdictions have mandated their installation in new construction, and none have mandated retrofit of existing one- and two-family housing stock. The Center for Fire Research at the National Institute of Standards and Technology has studied the impact of both smoke alarms and sprinklers in residential occupancies, and estimates that:

- When fire sprinklers alone are installed in a residence, the chances of dying in a fire are reduced by 69%.
- When smoke alarms alone are installed in a residence, a reduction in the death rate of 63% can be expected.
- When both smoke alarms and fire sprinklers are present in a home, the risk of dying in a fire is reduced by 82%, when compared to a residence without either.

Much has been written about the reduction of residential fire deaths due to improvements in building codes and the installation of smoke alarms. Without a doubt, these have had a substantial impact on the home fire problem. The annual number of fire deaths in residential occupancies continues to decline. The trend in fire death data, however, shows that the number of residential fire deaths is declining at a slower rate over the past 10 years than it did in the period 1977 through 1995.

Full-scale fire tests in residential settings suggest one explanation for this slowing in the rate of decline in residential fire deaths. The research shows that the available time to escape a flaming fire in a home has decreased significantly from 17 minutes in 1975 to only 3 minutes in 2003. This decrease in time to escape has been attributed to the

difference in fire growth rates of home furnishings. In short, a fire involving modern furnishings grows faster than a fire involving older furnishings. The practical impact of this finding is clear – smoke alarms alone may not provide a warning in time for occupants to escape a home fire.

We at USFA have carefully reviewed the data and the relevant research and it is our official position that all Americans should be protected against death, injury, and property loss resulting from fire in their residences. All homes should be equipped with smoke alarms and automatic fire sprinklers, and families should prepare and practice emergency escape plans. The Fire Administration fully supports all efforts to reduce the tragic toll of fire losses in this nation by advocating these actions, including the proposed changes to the International Residential Code that would require automatic sprinklers in all new residential construction.

Only fire sprinklers can detect fire AND automatically control it – affording families the time to make a safe escape and protect valuables and property. Please join with us in helping to save lives by supporting the installation of residential fire sprinklers in all American homes.

For more information on increasing the awareness of the benefits and availability of residential fire sprinkler systems, please visit the USFA Web site at www.usfa.dhs.gov and the Home Fire Sprinkler Coalition's Web site at www.homefiresprinkler.org.



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